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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,841	08/31/2001	Teresa B. Badura	YOR9-2001-0552-US1	2827
28211	7590	10/05/2006	EXAMINER	
FREDERICK W. GIBB, III GIBB INTELLECTUAL PROPERTY LAW FIRM, LLC 2568-A RIVA ROAD SUITE 304 ANNAPOLIS, MD 21401			CHOI, PETER H	
			ART UNIT	PAPER NUMBER
			3623	

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/943,841

Applicant(s)

BADURA ET AL.

Examiner

Peter Choi

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-8, 10, 12-16 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8, 10, 12-16 and 18-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 18, 2006 has been entered.

### ***Response to Amendment***

2. Claims 4, 9, 11, and 17 have been canceled.
3. Claims 21 and 22 have been added.
4. Claims 1-3, 5-8, 10, 12-16, and 18-22 are pending and have been examined on the merits discussed below.

### ***Response to Arguments***

5. Applicant's arguments filed July 18, 2006 have been fully considered but they are not persuasive.

Applicant argues that Marsh does not disclose that the substance of communication between the first and second party includes purchase order and billing communications.

The Examiner respectfully disagrees. The Marsh system includes a transceiver configured to receive billing information associated with a subscriber of a telecommunications service, which is thereby stored by a storage unit. The billing information is processed and analyzed to determine the optimal wireless communication service plan [Abstract]. The Examiner asserts that billing information includes "purchased" service, as it is old and well known in the telecommunications art that a user's bill is dependent on the amount and time of airtime consumed by a user and the type of calls made {i.e., local or toll}.

Applicant argues that the first and second parties in Marsh are not a purchasing corporation and a supplier.

The Examiner respectfully disagrees. In Marsh, the two parties include a telecommunications service provider and a subscriber of said telecommunications service. The subscriber constitutes a purchasing entity, and the service provider provides telecommunications service, making them a supplier of telecommunications service.

Applicant argues that Marsh evaluates cost effectiveness based on a wireless subscriber's usage patterns, and does not consider the subscriber's ability to communicate.

The Examiner respectfully disagrees. There is no language in the current claim limitations that further clarify the scope of an "ability to communicate". Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). As currently written, Marsh studies the calling profile record to assess a subscriber's call detail records according to when calls are made/received, what kind of calls are made or received, and where calls are made or received, along with an analysis of different ZIP codes of where users can purchase service. Therefore, the Examiner asserts that Marsh evaluates the user's "ability" to communicate, as evidenced by the analysis of the ability to purchase service in different ZIP codes, and the ability to make calls of different types, at different times, and at different places.

6. Applicant's arguments that Marsh fails to teach evaluating different modes of communication between the first and second parties in Marsh have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

Art Unit: 3623

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

8. Claims 1-3, 5-7, 14-16, and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Marsh et al. (U.S Patent #6,681,106).

As per claim 1, Marsh et al. teaches a method of selecting from a plurality of modes of communication comprising:

(a) inputting a first party's ability to communicate with a second party (**data regarding a given cellular account, subscriber, or group of subscribers if the service is provided for a corporate customer, is provided by a carrier; optimizer process receives as input the various service plans, service plan packages, and coverage areas offered by various carriers and that are associated with each service plan package**) [Column 7, lines 15-17, Column 16, line 60 – Column 17, line 1];

(b) evaluating a cost effectiveness of a mode of communication based on said first party's ability to communicate (**MAMBA system provides an analysis of periodically loaded wireless service usage of a given account or subscriber, and/or group of accounts or subscribers, and determines whether or not that subscriber, or group of subscribers, is on the optimal wireless service plan**

**according to the particular subscriber's usage patterns across a variable number of service billing periods)** [Column 8, lines 54-62], said evaluating comprising:

- (i) **inputting said first party's ability into a decision tree {although not described as a "decision tree", decision points 1498, 1501, 1504, 1512, 1519, 1523, 1526, 1529, and 1532 determine whether current savings of different package types are greater than max savings, performing the same functionality as a "decision tree", by providing decision modules with consequences (if YES, then save current savings; if NO, then move to next package type)}** [Figures 34A, 35A];
- (ii) **determining a cost of establishing and maintaining said mode of communication (calculate the cost of each service plan package combination for the given user usage profile)** [Column 8, lines 37-40];
- (iii) **determining a savings associated with said mode of communication (if the savings is sufficient (efficiency > 1.x), where x is the historical percentage savings, then change plans; determine how much package saves against current base package cost)** [Column 23, lines 50-52, Column 34, lines 65-67, Figure 35B]; and
- (iv) **comparing said cost to said savings to calculate a return on investment associated with said establishing and said maintaining of said mode of communication (relative attractiveness of a service plan instance is determined by comparing it to the corresponding actual billed usage of the current service plan for the given period; the specific measure, termed "efficiency", is calculated as current plan costs/service plan instance estimated cost; if the efficiency factor is**

**greater than 1, then the service plan instance is more cost effective than the other plan)** [Column 18, lines 34-45];

(c) repeating said evaluating for a different mode of communication if said first party's ability does not match a mode of communication previously evaluated (**MAMBA system then repeats the logical steps (load data, create a calling profile, identify optimal service plan options, make recommendations as to the best service plan and options) in accordance with a predefined periodic basis**) [Column 7, lines 31-33]; and

(d) implementing a communication arrangement when said first party's ability matches a mode of communication (**if there is a more optimal plan, then change plans**) [Column 23, lines 50-52].

As per claim 2, Marsh et al. teaches the method in claim 1, wherein a substance of said communication mode of communication comprise at least one of a purchase order and billing communications between a purchasing corporation and a supplier {calling package being a communications service "ordered" and billed for; The Marsh system includes a transceiver configured to receive billing information associated with a subscriber of a telecommunications service, the subscriber being a purchasing "corporation" and the telecommunication service provider being the "supplier"} [Abstract].



As per claim 3, Marsh et al teaches the method in claim 2, wherein said first party comprises said supplier **(telecommunications service providers)** and said second party comprises said purchasing corporation **(subscriber of a telecommunications service)** {The subscriber constitutes a purchasing entity, and the service provider provides telecommunications service, making them a supplier of telecommunications service} [abstract].

As per claim 5, Marsh et al teaches the method in claim 1, wherein said decision tree orders mode of communication that are evaluated by their cost effectiveness to the second party {listing of historical prediction model efficiency of Plans A-E, along with Current Plan} [Tables 7-8].

As per claim 6, Marsh et al. teaches the method in claim 1, further comprising before said implementing, performing a cost-benefit analysis **(calculate “efficiency” of each service plan instance to determine relative attractiveness)** with respect to a mode of communication matching said first parties ability [Column 18, lines 15-44].

As per claim 7, Marsh et al. teaches the method in claim 6, wherein said cost-benefit analysis compares the cost of establishing a matching mode of communication to the cost of a next mode of communication {listing of historical prediction model cost of Plans A-E, along with Current Plan} [Tables 7-8].

Claims 14-16 and 18-20 recite limitations already addressed by the rejection of claims 1 and 5-7 above; therefore, the same rejections apply.

The moving average monthly bill analysis (MAMBA) system utilized by Marsh et al. is implemented in software, hardware, or a combination thereof [Column 4, line 41 – Column 5, line 45], thus providing a program storage device readable by machine tangibly embodying a program of instructions executable by the machine to perform the steps of claims 1 and 5-7 as discussed above.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 8, 10, 12-13, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh et al. (U.S Patent #6,681,106).

As per claim 8, Marsh et al. teaches a method of selecting from a plurality of modes of communication comprising:

(a) inputting a first party's ability to communicate with a second party (**data regarding a given cellular account, subscriber, or group of subscribers if the service is provided for a corporate customer, is provided by a carrier; optimizer process receives as input the various service plans, service plan packages, and coverage areas offered by various carriers and that are associated with each service plan package**) [Column 7, lines 15-17, Column 16, line 60 – Column 17, line 1];

(b) evaluating a cost effectiveness of a standard mode of communication {**The current service plan instance is taken to represent a "standard" communication arrangement, and each of a plurality of alternative service plans constitutes a "non-standard" communication arrangement**} based on said first party's ability to communicate (**MAMBA system provides an analysis of periodically loaded wireless service usage of a given account or subscriber, and/or group of accounts or subscribers, and determines whether or not that subscriber, or group of subscribers, is on the optimal wireless service plan according to the particular subscriber's usage patterns across a variable number of service billing periods**), wherein said mode of communication comprises telephone {**wireless communication services**} [Column 8, lines 54-62];

said evaluating comprising:

(c) repeating said evaluating for a different mode of communication if said first party's ability does not match a mode of communication previously evaluated (**MAMBA system then repeats the logical steps (load data, create a calling profile, identify**

**optimal service plan options, make recommendations as to the best service plan and options) in accordance with a predefined periodic basis)** [Column 7, lines 31-33], wherein said non-standard mode of communication has a cost above said standard mode of communication **{Alternative (i.e. “non-standard”) communication arrangements are implemented when proven to be more “efficient” (calculated by current plan costs/service plan instance estimated cost), and yield more cost savings than the current communication arrangement}**, and wherein said evaluating comprises:

- (i) inputting said first party's ability into a decision tree **{although not described as a “decision tree”, decision points 1498, 1501, 1504, 1512, 1519, 1523, 1526, 1529, and 1532 determine whether current savings of different package types are greater than max savings, performing the same functionality as a “decision tree”, by providing decision modules with consequences (if YES, then save current savings; if NO, then move to next package type)}** [Figures 34A, 35A];
- (ii) determining a cost of establishing and maintaining said mode of communication **(calculate the cost of each service plan package combination for the given user usage profile)** [Column 8, lines 37-40];
- (iii) determining a savings associated with said mode of communication **(if the savings if sufficient (efficiency > 1.x), where x is the historical percentage savings, then change plans; determine how much package saves against current base package cost)** [Column 23, lines 50-52, Column 34, lines 65-67, Figure 35B]; and

(iv) comparing said cost to said savings to calculate a return on investment associated with said establishing and said maintaining of said mode of communication **(relative attractiveness of a service plan instance is determined by comparing it to the corresponding actual billed usage of the current service plan for the given period; the specific measure, termed "efficiency", is calculated as current plan costs/service plan instance estimated cost; if the efficiency factor is greater than 1, then the service plan instance is more cost effective than the other plan)** [Column 18, lines 34-45];

(d) performing a cost-benefit analysis with respect to a mode of communication matching said first parties ability **(calculate "efficiency" of each service plan instance to determine relative attractiveness)** [Column 18, lines 15-44];  
and

(e) implementing a communication arrangement when said first party's ability matches a mode of communication **(if there is a more optimal plan, then change plans)** [Column 23, lines 50-52].

Marsh et al. does not explicitly teach the evaluation and consideration of different modes of communication, including facsimile, e-mail, hard copy mail, and at least one on-line communication arrangement.

However, Official Notice is taken that facsimile, e-mail, hard copy mail, and the Internet are communication means that are old and well known in the art capable of

Art Unit: 3623

transmitting communications between a service provider and customer. Marsh et al. evaluates the cost effectiveness of a plurality of service providers and service plans to determine the optimal communications plan based on the needs of the user. Improving the quality of service and the value of services received by a subscriber, and enabling selection of a best telecommunications service are goals of Marsh et al. [Column 2, lines 53-55, abstract]; therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Marsh et al. to consider facsimile, e-mail, hard copy mail, and the Internet as doing so would expand the capabilities of Marsh et al. to include alternative modes of communication, thereby validating the analysis performed by Marsh et al., as it now includes additional modes of communication to consider to recommend to the user in order to improve the quality and cost effectiveness of the value of services received.

As per claim 21, Marsh et al. does not explicitly teach wherein said evaluating and said implementing of said mode of communication comprises evaluating and implementing at least one of telephone, facsimile, e-mail, hard copy mail, and at least one on-line communication arrangement.

However, Official Notice is taken that facsimile, e-mail, hard copy mail, and the Internet are communication means that are old and well known in the art capable of transmitting communications between a service provider and customer. Marsh et al. evaluates the cost effectiveness of a plurality of service providers and service plans to

Art Unit: 3623

determine the optimal communications plan based on the needs of the user. Improving the quality of service and the value of services received by a subscriber, and enabling selection of a best telecommunications service are goals of Marsh et al. [Column 2, lines 53-55, abstract]; therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Marsh et al. to consider facsimile, e-mail, hard copy mail, and the Internet as doing so would expand the capabilities of Marsh et al. to include alternative modes of communication, thereby validating the analysis performed by Marsh et al., as it now includes additional modes of communication to consider to recommend to the user in order to improve the quality and cost effectiveness of the value of services received.

Claims 10, 12, 13, 15, 16, and 22 recite limitations already addressed by the rejection of claims 2, 3, and 21 above; therefore, the same rejections apply.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Choi whose telephone number is (571) 272 6971.

The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PC

September 27, 2006

*Romain Janty*  
Primary Examiner  
Art Unit 3623